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Social Support, Trans Community Connectedness, and Mental Health Symptoms Among Transgender and Gender Nonconforming Adults

Samantha R. Pflum, Rylan J. Testa,
Kimberly F. Balsam, and Peter B. Goldblum
Palo Alto University

Bruce Bongar
Palo Alto University and Stanford University
School of Medicine

For those identifying as transgender or gender nonconforming (TGNC), the support of others can be instrumental in mitigating the challenges associated with cross-gender transition and identification. Social support and connectedness to the TGNC community can positively impact psychological well-being, facilitate resilience, and buffer against external stigmatization, prejudice, and discrimination (Frost & Meyer, 2012; Hendricks & Testa, 2012). The present study seeks to improve understanding of relationships among general social support (GSS), trans community connectedness (TCC), depressive symptoms, and anxiety symptoms. The inclusion of 2 forms of social support allows for greater examination of the differential impact of perceived general support (i.e., from both cisgender and TGNC friends and family members) and TGNC-specific social support (i.e., feeling connected to other TGNC people). To honor the diversity within the TGNC community, the impact of social support was examined among TGNC participants differentiated by gender identity, ethnicity, and living environment. As part of the Internet-based Trans Health Survey, standardized measures of depression, generalized anxiety, and social support were administered to 865 TGNC adults. For both trans male spectrum (TMS) and trans female spectrum (TFS) participants, general social support was significantly negatively associated with symptoms of anxiety and depression. However, the negative correlation between trans community connectedness and mental health symptoms was significant only for TFS participants. Variations in perceived TCC among ethnicity and living environment groups—distinguished by gender identity—are also explored. Finally, targets for future minority stress and social support research with the TGNC population are discussed.

Keywords: anxiety, depression, social support, transgender

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Although research on transgender and gender nonconforming (TGNC) populations is in its infancy, extant findings have elucidated certain themes. First, TGNC individuals are frequently subjected to the effects of societal transphobia, including gender-based discrimination, rejection, and violence (Grant et al., 2011; Hendricks & Testa, 2012; Lombardi, 2009). Second, these external stressors are associated with a higher prevalence of psychiatric symptoms in TGNC individuals (Hendricks & Testa, 2012; Lombardi, 2009; Meyer, 2003). Although strengths-based research examining protective and resilience-bolstering factors has been limited, preliminary evidence suggests that social support may be particularly important (Budge, Adelson, & Howard, 2013). In this paper, we examine the effects of both general social support (GSS) and TGNC-specific community support on the mental health of TGNC people.

Samantha R. Pflum, Rylan J. Testa, Kimberly F. Balsam, and Peter B. Goldblum, Department of Clinical Psychology, Palo Alto University; Bruce Bongar, Department of Clinical Psychology, Palo Alto University, and Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine.

Rylan J. Testa is now at Department of Psychology, Rhodes College.

Correspondence concerning this article should be addressed to Samantha R. Pflum, 1791 Arastradero Road, Palo Alto, CA 94304. E-mail: spflum@paloaltou.edu

General Social Support

The support of others can be instrumental in mitigating the challenges associated with being TGNC. Social support catalyzes the use of healthy coping mechanisms (e.g., humor, hobbies, spirituality, gender-affirming psychotherapy), reduces psychological distress related to transphobia and discrimination, and predicts positive mental health (Budge et al., 2013; Sanchez & Vilain, 2009) and physical health (Grant et al., 2011) outcomes among TGNC people. Family and peer networks that embrace nonbinary gender identities allow TGNC individuals to develop greater self-acceptance and congruence with their internal sense of gender (Budge et al., 2013).

Studies of cisgender[1] adults suggest that utilization of social support may vary based on gender. Cisgender women are more likely than cisgender men to utilize social support and to view it as more important; men may view peer support as "feminine" and feel obligated to cope with difficult situations independently. These gender differences likely result from gender-based socialization (Budge et al., 2013; Dwyer & Cummings, 2001), thus it is unclear how social support may be viewed or utilized by different

[1] The term *cisgender*, derived from the Latin prefix *cis* ("on the same side"), describes people who are not transgender or gender nonconforming (Stryker, 2008).

TGNC populations. For the present sample of TGNC participants, examined separately by gender identity, it was proposed that general social support would be negatively associated with symptoms of depression and anxiety.

Trans Community Connectedness (TCC)

Connectedness to a community of similar others is a key element of mental health among TGNC individuals (Frost & Meyer, 2012; Sanchez & Vilain, 2009). Frequently taking the form of TGNC-specific support groups and social networks, connectedness to this community can serve as a counterpoint to external gender-based stressors by providing group-level coping resources (Frost & Meyer, 2012; Hendricks & Testa, 2012). TGNC individuals may seek support from similar peers to normalize and validate emotional experiences related to discrimination. However, not all TGNC people have equal access to similar peer networks. Individuals who are willing to disclose their TGNC identity are increasingly able to utilize the positive resources available within the TGNC community (Budge et al., 2013; Hendricks & Testa, 2012). Limited research has addressed gender differences in access to trans community connectedness. Trans women are more likely than trans men to report a lack of TGNC friends and acquaintances during their initial coming out period; they are also more likely to learn about the trans community at a later identity development stage than trans men (Beemyn & Rankin, 2011). In the present study, it was hypothesized that trans community connectedness would be negatively associated with symptoms of depression and anxiety; this hypothesis was examined separately among trans female and trans male spectrum participants.

Depression and Anxiety

Compared with the general U.S. population, TGNC individuals report significantly higher levels of anxiety (26–38% vs. 28.8% in the general population) and depression (48–62% vs. 16.6% in the general population) (Clements-Nolle et al., 2001; Kessler et al., 2005). TGNC individuals who experience discrimination, violence, or interpersonal rejection are at risk for developing symptoms of depression (Nemoto, Bodecker, & Iwamoto, 2011; Testa et al., 2015). Significant anxiety has been reported at the time of first recognition of one's TGNC identity and throughout the transition process (Strain & Shuff, 2010).

Intersectionality

Different ethnic groups have varying experiences related to social support, gender-based stressors, and health outcomes. Racial bias presents a noteworthy additional risk of prejudice and discrimination for TGNC individuals. TGNC people of color report significantly higher rates of HIV infection, discrimination by medical providers, and lack of health insurance as compared with Caucasian TGNC individuals (Grant et al., 2011). Nemoto and colleagues (2011) noted that Caucasian and Latina TGNC women reported significantly higher needs for social support than participants of other ethnic groups, whereas African American and Asian/Pacific Islander TGNC women received greater social support from family members. Targeted support through connectedness to similar peers can enhance in-group identity and contribute to well-being around both gender and ethnic identities (Nemoto et al., 2011). Based on established differences in support-seeking and resource availability, the present study hypothesized that Caucasian TGNC participants will report higher scores on a measure of trans community connectedness than their ethnic minority peers.

Rural communities may have unique challenges and needs related to social support, coping, and health. TGNC-specific health care resources, such as hormone therapy and competent psychotherapy, are frequently lacking (Horvath et al., 2014). Stigma may serve as a barrier to the development of TGNC-inclusive networks that can counteract the effects of transphobia and minority stress. Without social and institutional supports, rural gender minorities may be more likely than their urban peers to experience negative health outcomes, to recognize their gender identity at a later age, and to stay involved in unhealthy or coercive romantic relationships (Wienke & Hill, 2013). To address this domain in the present study, it was hypothesized that TGNC participants in urban and suburban areas will report higher scores on a measure of trans community connectedness as compared with their peers in small towns and rural areas.

Method

Procedure

Data for this study were collected as part of the 115-question Trans Health Survey, an anonymous online assessment of stress, resilience, and mental and physical health in the TGNC adult community. Eligible participants indicated that their gender identity (e.g., man, woman, trans man, trans woman, genderqueer, etc.) was different from their sex assigned at birth (e.g., male, female, or intersex). Participants were residents of the U.S. or Canada recruited online through social media, local and national TGNC-focused listservs, and contact with leaders in the TGNC community. Targeted emails and postings were addressed to "Trans People of Color" via applicable online venues. No remuneration was provided.

Participants

A total of 1,414 participants consented to and began completing the Trans Health Survey; 67% completed the survey, with the others stopping at different points. Thirty-four participants who indicated that they were younger than 18 years old were removed from the dataset. Partial and/or invalid entries were also removed, resulting in a total of 1,167 valid entries. Inclusion in the present study's analyses was limited to individuals who answered all questions about GSS, TCC, depression, and generalized anxiety (N = 865). As TGNC individuals of differing gender identities endorse varying risk and protective factors (Beemyn & Rankin, 2011), analyses in the present study were conducted separately based on gender spectrum. Participants who identified as woman, trans woman, genderqueer assigned female at birth, and intersex identifying as woman were grouped as trans female spectrum (TFS, n = 427). Those who identified as man, trans man, genderqueer assigned male at birth, and intersex identifying as male) were grouped as trans male spectrum (TMS, n = 438). Demographics for these participants are presented in Table 1.

Measures

General social support. GSS was measured with the Berlin Social Support Scales (BSSS) – Perceived Social Support Subscale.

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Table 1
Summary of Demographic Information for Participants, Differentiated by Gender Groups (N = 865)

Demographic characteristic	Man (n = 145)	Woman (n = 106)	Trans man (n = 259)	Trans woman (n = 163)	Genderqueer (male at birth) (n = 34)	Genderqueer (female at birth) (n = 158)
Age, *M* (*SD*)	31.9 (11.0)	39.2 (16.2)	30.9 (11.3)	37.2 (14.9)	34.6 (13.9)	24.5 (7.1)
Sex at birth, %						
Female	97.2	—	95.4	1.2	—	100.0
Male	—	98.1	1.5	94.5	100.0	—
Intersex	1.4	—	—	.6	—	—
No response	1.4	1.9	3.1	3.7	—	—
Ethnicity, %						
Caucasian/White	86.2	88.7	88.4	90.8	94.1	86.1
Hispanic/Latino	7.6	6.6	4.6	4.9	8.8	4.4
Multiracial	4.8	5.7	4.2	1.8	2.9	7.0
African-American	3.4	.9	3.9	.6	2.9	1.3
Asian-American	1.4	1.9	1.9	2.5	—	.6
American Indian	2.1	.9	—	1.2	—	2.5
Other	1.4	1.9	1.2	1.2	—	—
Pac. Islander	—	—	—	1.2	—	2.5
No response	.7	—	.4	.6	—	—
Annual household income, %						
Low (<$30K)	32.4	39.7	38.6	40.5	44.1	38.7
Middle	46.9	37.6	41.6	41.2	38.2	42.1
High (>$100K)	18.7	21.7	16.2	19.0	14.7	19.0
No response	2.1	.9	3.5	—	2.9	.6
Education, %						
High school & less	8.3	11.3	8.5	9.8	14.7	17.1
College/vocational	64.2	65.1	61.5	67.8	52.9	60.1
Graduate school	27.6	22.6	30.1	22.7	32.4	22.8
No response	—	.9	—	—	—	—
Living environment, %						
Urban	53.8	43.4	52.9	41.7	55.9	50.0
Suburb	23.4	39.6	24.7	34.4	38.2	27.2
Small town	15.2	13.2	15.4	14.1	2.9	14.6
Rural	7.6	3.8	6.9	9.8	2.9	8.2

Note. Participants represented in this table represent a subset of individuals who completed the Trans Health Survey. Full sample N = 1,167.

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This 8-item subscale measures both instrumental and emotional support, and Likert-type response options range from *strongly disagree* to *strongly agree*. The full scale was developed and validated for use with adult medical populations but is also valid for healthy populations. The BSSS has demonstrated validity and reliability (Cronbach's alpha = .83; Schulz & Schwarzer, 2003).

Trans community connectedness. TCC was assessed through the community connectedness subscale of the Gender Minority Stress and Resilience Measure (GMSR; Testa et al., 2015). This resilience scale reflects affiliation and belongingness with the TGNC community and is positively correlated with perceived social support. For all five connectedness items, response options ranged on a 7-point Likert-type scale from *strongly disagree* to *strongly agree*. The GMSR shows preliminary reliability and validity, with Cronbach's alpha coefficients ranging from .61 to .93 (Testa et al., 2015).

Depressive symptoms. Depressive symptoms were measured using the Center for Epidemiologic Studies Depression Scale-10 (CES-D-10; Radloff, 1977), a 10-item self-report measure that assesses depressed mood, feelings of guilt and worthlessness, helplessness and hopelessness, psychomotor retardation, appetite loss, and sleep disturbance. Items are scored on a 4-point Likert-type scale ranging from *rarely or none of the time* to *most or all of the time*. The CES-D is a reliable measure with high concurrent validity, construct validity, internal consistency and Cronbach's alpha coefficients ranging from .85 to .90 (Knight, Williams, McGee, & Olaman, 1997; Radloff, 1977).

Generalized anxiety symptoms. The Generalized Anxiety Disorder 7-item scale, (GAD-7), was used to evaluate symptoms of generalized anxiety. Symptom frequency was reported on a 4-point Likert-type scale ranging from *never* to *nearly every day*. The GAD-7 is a brief self-report measure that is capable of identifying functional impairment related to GAD symptom severity. Internal consistency of this measure is excellent (Cronbach's alpha = .92), and test–retest reliability and procedural validity are good (intraclass correlation = .83; Spitzer, Kroenke, Williams, & Löwe, 2006).

Data Analysis

For Hypotheses 1 and 2, multiple regression was utilized to examine associations among GSS, TCC, depressive symptoms, and anxiety symptoms. Hypothesis 3 utilized independent sample t tests to examine mean scores on a measure of TCC for ethnic minority and Caucasian participants. One-way ANOVA was used to assess differences in mean TCC scores between living environment groups in Hypothesis 4.

Because of established differences in gender and study variable, all analyses were independently conducted for TMS and TFS

participants. As age was significantly correlated with GSS (r = .100), TCC (r = .118), depressive symptoms (r = −.286), and anxiety symptoms (r = −.267) at the 0.01 level, age was controlled for in all regression equations. Ethnicity, SES, and living environment were not significantly correlated with the independent or dependent variables, and thus were not controlled for.

Results

Hypotheses 1 and 2: Social Support, Community Connectedness, and Mental Health Symptoms

For participants on the trans female spectrum (TFS) and trans male spectrum (TMS), general social support was significantly negatively associated with symptoms of depression and anxiety. Among TFS participants, TCC was significantly negatively correlated with symptoms of depression and anxiety. General social support accounted for the most variance in depressive (R^2 = .27, F(2, 381) = 71.042, β = −.391), and anxiety (R^2 = .18, F(2, 381) = 33.862, β = −.234) symptoms in the TFS group. The relationship between TCC, depression, and anxiety was not significant for TMS participants; GSS was the only factor that accounted for variance in symptoms of depression (R^2 = .23, F(2, 390) = 45.615, β = −.334) and anxiety (R^2 = .11, F(2, 390) = 21.984, β = −.186). Results of these analyses are depicted in Table 2. Hypothesis 1 was confirmed for both gender groups, and Hypothesis 2 was confirmed for TFS participants only.

Hypothesis 3: Ethnicity and Trans Community Connectedness

Because of the low number of TGNC participants of color in this sample, separate independent sample t tests could not be conducted with participants from different ethnic minority groups. Consequently, Caucasian participants were compared to ethnic minority participants. Within the TFS group, there was not a significant difference between mean TCC scores for Caucasians (M = 11.98, SD = 4.92) and ethnic minorities (M = 12.22, SD = 4.97; t(425) = −.321, p = .748, d = −.05). For TMS participants, differences in mean TCC scores between Caucasians (M = 11.77, SD = 5.10) and ethnic minorities (M = 10.29, SD = 5.62) approached but did not exceed significance, t(436) = 1.953, p = .051, d = .28. Despite a lack of statistical significance, the effect size for this analysis was found to fall within Cohen's (1988) convention for a small effect size (d = .20). These results suggest that Caucasian participants may feel more connected to the trans community than their ethnic minority peers. Although connection to the trans community can foster collective self-esteem for both Caucasian and ethnic minority trans individuals, trans people of color may experience exclusion from more visible community supports.

Table 2
Results of Multiple Regression Analyses of General Social Support (GSS), Trans Community Connectedness (TCC), Depression, and Anxiety Among TFS and TMS Participants

	Depression				Anxiety			
Variable	B	$SE\ B$	β	R^2	B	$SE\ B$	β	R^2
Trans female spectrum (TFS; n = 427)								
Age	−.123	.022	−.241**	.085	−.101	.020	−.241**	.075
GSS	−.504	.058	−.391**	.268	−.248	.052	−.234**	.146
TCC	−.216	.069	−.143*	.285	−.169	.061	−.136*	.168
Trans male spectrum (TMS; n = 438)								
Age	−.151	.029	−.237**	.080	−.123	.026	−.229**	.067
GSS	−.437	.066	−.312**	.190	−.190	.059	−.162**	.110
TCC	−.118	.068	−.083	—	−.114	.060	−.095	—

* $p < .05$. ** $p < .001$.

Hypothesis 4: Living Environment and Trans Community Connectedness

There were no statistically significant differences between urban (M = 12.42, SD = 4.71), suburban (M = 11.65, SD = 5.27), small town (M = 12.17, SD = 5.25), and rural (M = 10.93, SD = 3.90) living environment groups on TCC scores as determined by one-way ANOVA for TFS (F(3, 423) = 1.233, p = .297, η^2 = .01) and TMS (F(3, 434) = .374, p = .772, η^2 = .00) participants. Although statistical significance was not reached, multiple comparison t tests following one-way ANOVA indicated that the greatest mean difference in TCC scores was found between participants located in urban and rural environments. Hypothesis 4 was not confirmed.

Discussion

Results indicated that, to varying degrees, GSS and TCC serve as protective factors against symptoms of depression and anxiety. Gender differences in the relationship between social support and mental health symptoms speak to the heterogeneity of the TGNC population. General social support was significantly linked to lower symptoms of depression and anxiety among both TFS and TMS participants. For TFS, but not TMS participants, TCC was also significantly associated with lower symptoms of depression and anxiety.

As part of the socially constructed female gender affirmation process, TFS individuals may seek out and value TGNC-specific social support more readily than TMS individuals. During the initial coming out process, trans women report having fewer trans friends and acquaintances than trans men (Beemyn & Rankin, 2011); this deficit may subsequently lead TFS individuals to immerse themselves in the TGNC community and to derive greater mental health benefits from this involvement. Support groups targeted toward trans women may also be more socially visible, further enabling TFS people to access and gain support from such networks. Additionally, TMS individuals may utilize a more "masculinized" form of coping stressing independence rather than dependence on the TGNC community. For the TMS population, relationships with any positive, accepting individuals—regardless of their TGNC or cisgender status—may be sufficient to protect against symptoms of depression and anxiety.

Although the present study did not reveal differences in TCC scores between Caucasian and ethnic minority participants, this may be attributable to the aggregation of ethnic minority groups and the small sample of TGNC participants of color. As noted earlier, different ethnic minority populations may have different

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experiences and needs related to social support. However, it is likely that connection to the TGNC community facilitates collective self-esteem and provides a positive counterpoint to external stigma and prejudice for both Caucasian and ethnic minority TGNC individuals.

Extant research indicates that rurally located TGNC individuals report lower levels of GSS and TCC as compared with those residing in urban areas (Horvath et al., 2014); however, significant differences in TCC scores across living environments were not found in the current sample. This may be linked to the rising popularity of Internet-based TGNC communities and support groups, often accessible to TGNC individuals in isolated environments. As this sample was recruited online, participants may be more likely to utilize Internet-based supports. The prevalence of online resources would therefore contribute to narrowing the social support gap between rural and urban trans communities.

Limitations and Future Research

It is important to consider several limitations in interpreting these results. As the present analyses are correlational, further research is needed to establish causal and longitudinal relationships between social support and mental health symptoms. The cross-sectional nature of this study limits any conclusions about the utility of different forms of social support across the life span. The online convenience sample—although large—may not be representative of the experiences of all TGNC individuals. The online format of the Trans Health Survey may limit the participation of those in lower SES groups, who are less likely to have consistent Internet access. Despite recruitment efforts targeted toward TGNC people of color, this study provides limited information about the experiences of ethnic minority TGNC communities, as analyses relied on combining all ethnic minority groups. Further research on intersectional identities can elucidate the protective and resilience factors endorsed by TGNC individuals of color. Future efforts may benefit from greater in-person recruitment and provision of surveys in a paper-and-pencil format, which can produce greater response rates within African American and Latino/a communities (Bradford, Xavier, Hendricks, Rives, & Honnold, 2007).

Grouping participants into TMS and TFS groups precludes more detailed examinations of gender differences within these diverse populations. It is beyond the scope of this brief article to enumerate the differences in social support and mental health symptoms among genderqueer or gender-expansive populations. Extant research has generally disregarded the experiences of TGNC people with nonbinary identities, instead focusing on those who identify as either male or female. The present study partially rectified this limitation by including participants with a variety of gender identities, but the overarching TFS and TMS categories may unintentionally disregard important social support and mental health experiences among participants with nonbinary identities.

Conclusion

Results indicated that, to varying degrees, GSS and TCC are associated with lower symptoms of depression and anxiety. GSS was significantly linked to lower symptoms of depression and anxiety among both TFS and TMS participants, whereas TCC was significantly associated with lower mental health symptoms in the TFS group only. For the TMS respondents, effect size differences between Caucasian and ethnic minority groups suggest that Caucasian TMS participants may experience greater perceived connectedness to the trans community. Further research is necessary to confirm this finding. Significant differences in TCC among living environment groups were not found, likely because of the high prevalence of Internet use in this sample.

Given the present findings, future minority stress research may benefit from an examination of the utility of GSS and TCC as a buffer against stress in the TGNC population. Additionally, exploring whether specific social support factors (e.g., kinship with other TGNC people, satisfying interactions with cisgender or TGNC people) are linked to lower mental health symptoms can facilitate the identification of targeted interpersonal resources for the TGNC population.

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